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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,479	10/28/2003	Danilo Mascolo	856063.754	5220
38106	7590	02/04/2005		EXAMINER
				NHU, DAVID
			ART UNIT	PAPER NUMBER
			2818	

DATE MAILED: 02/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Supply

OM

Office Action Summary

<i>Supply</i>	Application No.	Applicant(s)
	10/695,479	MASCOLO ET AL.
	Examiner	Art Unit
	David Nhu	2818

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 13 October 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 18-23 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-17, 24-41 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| <p>1)<input type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2)<input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3)<input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.</p> | <p>4)<input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.</p> <p>5)<input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6)<input type="checkbox"/> Other: _____.</p> |
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DETAILED ACTIONS

The action on 12/1/2004 is an error.

Election/Restrictions

1. Applicant's election of Group I (Claims 1-17, 24-41) is acknowledged. Claims 1-17, 24-41 are remained for examination. Accordingly, claims 18-23 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claims Objection

2. **Claim 1**, "the passivated **metal** nanoclusters" should be --the passivated metallic nanoclusters--.

Claim 3, "the nanoclusters array" lacks a clear antecedent basis.

Claims 11, "forcing the nanoparticles" should be --forcing the conductive nanoparticles --

Claim 12, "passivating the nanoparticles" should be --passivating the conductive nanoparticles-- ; and "heating the nanoparticles" should be --heating the conductive nanoparticles-- ; "the first electrode" lacks a clear antecedent basis.

Claim 13, "the **metal** nanoparticles" should be --the conductive nanoparticles--

Claim 15, "passivating the metal; the metallic suspension" lack a clear antecedent basis.

Claim 16, "the electric field" should be --the non-homogenous electric field--

Claim 26, "the thiol molecules; the surfaces" lack a clear antecedent basis.

Claim 30, "said metallic nanoclusters" should be --said passivated metallic nanoclusters--

Claim 34, "the four electrodes" lacks a clear antecedent basis.

Claims 37, 39, "said microcavity" should be --said integrated microcavity--

Claim 40, "attaching the metallic nanoclusters" should be --attaching the passivated metallic

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nanoclusters--; "forcing the passivated nanoclusters" should be --forcing the passivated metallic nanoclusters--

Claim 41, "the passivated nanoclusters" should be --the passivated metallic nanoclusters--

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Clauss'887, Winningham'463, Jacobson'083 are cited as of interest.
4. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) day from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned (see 710.02 (b)).
5. Any inquiry concerning this communication on earlier communications from the examiner should be directed to David Nhu, (571)272-1792. The examiner can normally be reached on Monday-Friday from 7:30 AM to 5:00 PM. The examiner's supervisor, David Nelms can be reached on (571)272-1787.

The fax phone number for the organization where this application or proceeding is assigned is (571)273-1792.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956

David Nhu 



February 2nd 2005